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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,493	03/30/2000	Geoffrey B. Rhoads	10512/0006/25SD	8045

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

SMITHERS, MATTHEWS

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,493

Applicant(s)

RHOADS, GEOFFREY B.

Examiner

Matthew B Smithers

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-133 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-133 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, 17, 31-38, 40-41, and 43-45, drawn to amplitude encoding in a signal using quantization techniques, classified in class 375, subclass 240.03.
- II. Claims 5, 42, 75-77, and 79-84, drawn to inserting and detecting abstract signal features in a signal, classified in class 375, subclass 240.08.
- III. Claims 6, 7, 23, 28-30, 46-61, 70-72, 78, 85, and 86 drawn to analyzing digital signals before encoding the signal, classified in class 375, subclass 240.29.
- IV. Claim 8, drawn to error coding using interleaved codes, classified in class 714, subclass 756.
- V. Claims 9-10, 62, and 74, drawn to generating a fixed key for preprocessing message data, classified in class 380, subclass 43.
- VI. Claims 11-14, 16, 20-22, and 63-68, drawn to encoding with pseudo random key bits generated with a chaotic generator, classified in class 380, subclass 263.
- VII. Claims 15, 39, and 87-89, drawn to guaranteeing the uniqueness of a watermark, classified in class 713, subclass 176.

Art Unit: 2134

- VIII. Claims 18, 19, 69, and 73, drawn to encoding a signal using inverted instances of the bit stream, classified in class 341, subclass 73.
- IX. Claims 24-27, and 90-91, drawn to automatically varying the encode/decode algorithm using watermark parameters, classified in class 380, subclass 28.
- X. Claims 94-133, drawn to pre-processing a digital signal, classified in class 704, subclass 200.1.
- XI. Claims 92 and 93, drawn to enabling content after watermark verification, classified in class 380, subclass 232.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-XI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I-XI has separate utility such as Group I has utility as to coding any sampled digital signal through amplitude quantization; Group II has utility in detecting abstract signal features within a sampled digital signal and using the features to perform the coding process; Group III has utility in analyzing and filtering sampled digital signals to determine delimited areas of the signal; Group IV has utility in error coding a message using cross interleaved codes; Group V has utility in preprocessing a message by generating a key whose bits correspond uniquely to each bit in the message; Group VI has utility as to coding a digital data signal using pseudo-random key bits produced by a chaotic generator; Group VII has utility in verifying a watermark by checking the attached timestamp or

Art Unit: 2134

hash or message digest; Group VIII has utility in encoding a signal using inverted or offsetting instance of the bit stream signal; Group IX has utility in adjusting the algorithm for the coding of the signal; Group X has utility in preprocessing a digital signal by using chosen bits from the data signal; Group XI has utility in enabling usage of content after a verification process. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

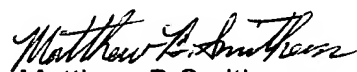
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B Smithers whose telephone number is (703) 308-9293. The examiner can normally be reached on Monday-Friday (9:00-5:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Art Unit: 2134

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Matthew B Smithers
Primary Examiner
Art Unit 2134

August 14, 2003